



United States of America  
**FEDERAL COMMUNICATIONS COMMISSION**  
**AM BROADCAST STATION CONSTRUCTION PERMIT**

Authorizing Official:

Official Mailing Address:

FAMILY STATIONS, INC.  
112 NORTH ELM STREET  
SHENANDOAH IA 51601

Son Nguyen  
Son Nguyen  
Supervisory Engineer  
Audio Division  
Media Bureau

Facility Id: 25095

Call Sign: WKDN

Permit File Number: BP-20171031AAE

Grant Date:

**JAN 31 2018**  
This permit expires 3:00 a.m.  
local time, 36 months after the  
grant date specified above.

This Permit Modifies Permit No.: BML-20120921AFA

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:  
Local Standard Time (Non-Advanced)

Jan.	7:15 AM	5:00 PM	Jul.	4:45 AM	7:30 PM
Feb.	7:00 AM	5:30 PM	Aug.	5:15 AM	7:00 PM
Mar.	6:15 AM	6:00 PM	Sep.	5:45 AM	6:15 PM
Apr.	5:30 AM	6:45 PM	Oct.	6:15 AM	5:30 PM
May	4:45 AM	7:15 PM	Nov.	6:45 AM	4:45 PM
Jun.	4:30 AM	7:30 PM	Dec.	7:15 AM	4:30 PM

Callsign: WKDN

Permit No.: BP-20171031AAE

Name of Permittee: FAMILY STATIONS, INC.

Station Location: PHILADELPHIA, PA

Frequency (kHz): 950

Station Class: B

Antenna Coordinates:

Day

Latitude: N 39 Deg 58 Min 28 Sec

Longitude: W 75 Deg 16 Min 19 Sec

Night

Latitude: N 39 Deg 58 Min 28 Sec

Longitude: W 75 Deg 16 Min 19 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 43.0 Night: 0.65

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1026798	
2	1026797	
3	1026796	

Night:

Tower No.	ASRN	Overall Height (m)
1	1026798	
2	1026797	
3	1026796	

## DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 2095.21 Night: 250.972

Standard RMS (mV/m/km): Day: 2201.048 Night: 263.73

Augmented RMS (mV/m/km):

Q Factor: Day: Night:

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	82.0
2	0.9800	-115.700	93.0000	114.000	0	82.0
3	0.3560	128.800	186.0000	114.000	0	82.0

\* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.5000	87.000	0.0000	0.000	0	82.0
2	1.0000	0.000	93.0000	114.000	0	82.0
3	0.5000	-87.000	186.0000	114.000	0	82.0

\* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

## Inverse Distance Field Strength:

The inverse distance field strength at a distance of one kilometer from the above antenna in the directions specified shall not exceed the following values:

Night:

Azimuth:	Radiation:
114	401.92 mV/m
294	10.5 mV/m

## Special operating conditions or restrictions:

- 1 Permittee shall install a type accepted transmitter, or submit application (FCC Form 301) along with data prescribed in Section 73.1660(b) should non-type accepted transmitter be proposed.
- 2 The permittee must submit a proof of performance as set forth in either Section 73.151(a) or 73.151(c) of the rules before program tests are authorized.  
A proof of performance based on field strength measurements, per Section 73.151(a), shall include a complete nondirectional proof of performance, in addition to a complete proof on the (day) and (night) directional antenna system. The nondirectional and directional field strength measurements must be made under similar environmental conditions. The proof(s) of performance submitted to the Commission must contain all of the data specified in Section 73.186 of the rules.  
Permittees who elect to submit a moment method proof of performance, as set forth in Section 73.151(c), must use series-fed radiators. In addition, the sampling system must be constructed as described in Section 73.151(c) (2) (i).
- 3 A license application (FCC Form 302) to cover this construction permit must be filed with the Commission pursuant to Section 73.3536 of the Rules before the permit expires.
- 4 The permittee/licensee must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.
- 5 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.

\*\*\* END OF AUTHORIZATION \*\*\*